DOCUMENT RESUME

ED 399 913 HE 029 549

TITLE	The Challenge for Higher Education: 1996 State of Washington Master Plan for Higher Education.
INSTITUTION	Washington State Higher Education Coordinating Board, Olympia.
PUB DATE	96
NOTE	43p.
PUB TYPE	Viewpoints (Opinion/Position Papers, Essays, etc.) (120) -- Statistical Data (110)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Agency Cooperation; *Change Strategies; Community Colleges; Educational Facilities Planning; Educational Finance; Educational Planning; Enrollment Projections; Enrollment Rate; Enrollment Trends; Financial Exigency; *Higher Education; Institutional Cooperation; *Long Range Planning; Master Plans; Organizational Change; Private Colleges; Public Colleges; State Boards of Education; State Colleges; State Universities; *Statewide Planning; Student Financial Aid
IDENTIFIERS	*Washington

ABSTRACT

The State of Washington has set an enrollment goal of reaching the 70th percentile participation rate for upper-division and graduate/professional enrollments by 2020 with lower-division growth maintaining the current participation rate. From 1997-2010, the enrollment plan proposes to increase enrollments at the main campuses to physical capacity, build branch campuses, and expand centers in high-demand or underserved areas. Community and technical colleges and independent institutions will also maintain their current participation rates. These actions will increase enrollment by nearly 57,000 students. More than 27,000 full-time-equivalent students will still need to be served by 2010. To serve these additional students, a variety of solutions are proposed: (1) state funding of new enrollments, new technology, and a study of costs and benefits of diverse delivery options; (2) provision by public two-and four-year institutions of increased access, better responses to changes in the workplace, reports of outcomes, achievement of state-wide goals regarding diversity issues, the forging of new partnerships, and preparation of an increased proportion of community college students for baccalaureate education; (3) provision by independent institutions of increased access; (4) better preparation of students in K-12 schools for additional education; and (5)acceptance by the Higher Education Coordinating Board of its leadership role with such actions as convening of a "Blue Ribbon Committee" on financial aid. Statistical tables are provided. (JLS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 399 913

The *Challenge* for Higher Education

1996 State of Washington Master Plan for Higher Education

Needs:
Population
Workforce
Public Expectations
Financial Constraints

Access with Quality
to
Individuals,
Families, Society,
Economy

Solutions:
Focus on Learning
Technology
Partnerships
Efficiencies
Financial Aid
Investment
Incentives

BEST COPY AVAILABLE

HE 029 549

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Washington State
Higher Education
Coordinating Board

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

Return on Investment

Higher Education Coordinating Board

BEST COPY AVAILABLE

Members of the Washington State Higher Education Coordinating Board

Richard R. Sonstelie, Chair
Puget Sound Power & Light Company
Bellevue, Washington 98009-9734

Frank Brouillet
2128 7th Avenue SW
Puyallup, Washington 98371

James Faulstich
Federal Home Loan Bank of Seattle
Seattle, Washington 98101

Larry Hanson
The Herald
Everett, Washington 98201

Mike McCormack
Institute for Science and Society
Ellensburg, Washington 98926

Vicki McNeill
East 1003 Rockwood Blvd.
Spokane, Washington 99203

Gay Selby
P.O. Box 354
Kelso, Washington 98626

David Shaw
Pasco School District
Pasco, Washington 99301

Chang Mook Sohn
Office of the Forecast Council
Olympia, Washington 98504-0912

Marcus S. Gaspard
Executive Director
Higher Education Coordinating Board
917 Lakeridge Way
Olympia, WA 98504
(360) 753-7800
FAX (360) 753-7808

Statement from the Chair

The 1996 Update to the Master Plan for Higher Education is about change and the challenges that confront higher education. Demographics show that the state must provide access for over 84,000 additional students by the year 2010. The state's population is growing, with the 17-25 year old population growing very rapidly. Students are becoming more diverse, the workplace is demanding new and enhanced skills, technology is generating change throughout business and education, and resources continue to be limited. These changes are forcing all of us in business, government, and education to be more productive and creative. It is clear to the Higher Education Coordinating Board that the coming years are crucial ones for higher education.

In a recent survey of Washington residents, 77% of those with children at home wanted their children to attend a college or technical/vocational school in Washington. Almost all of them thought there would be places for their children in Washington higher education. However, while about half of all high school graduates continue on for further education today, the number of students in this age group is growing especially fast. If we do not increase access at all, only one-third of our high school graduates may find room on our campuses.

We believe that higher education is an extremely important state investment, returning benefits to individuals, their families and employers, and to the state and society at large. Investing additional state funds in our enrollment plan (described on pages 22-23) will reap important benefits for more of the state's citizens and support businesses in their efforts to compete in the world marketplace.

In addition, our institutions must not only increase access but they must also improve quality and increase productivity. This is a tall order, but one that can be met by our excellent higher education institutions. It will require moving away from old ways of doing business toward new ideas and new ways of teaching and learning.

The Board has outlined some possible solutions (pages 26-33) and issued challenges (pages 34-38) to the state, its students, its public and independent institutions, and to the Board itself that we hope will generate creative solutions to the access challenge. We expect to undertake additional work during 1996 on financial aid issues and enrollment allocation, and to work closely with the Governor's Higher Education Task Force in its efforts to identify appropriate funding strategies for higher education. Success in these efforts will require the support of every citizen.

We look forward to a challenging but exciting future.

Sincerely,

Richard R. Sonstelie, Chair
Higher Education Coordinating Board

The challenge

for the higher education system

of the State of Washington

is to provide the opportunity

for access to each of its citizens

to quality programs of learning

which allow individuals

to reach their full potential

and provide benefit to society

as a whole.

Table of Contents

Executive Summary 5

The Challenge for Higher Education 6

Return on Investment to Individuals and Society 7

Population Needs 11
- Growing 17-25 Year Old Population
- Areas of Growth
- Changing Demographics

Workforce Needs 14
- The Changing Workplace
- Demand for Retraining

Public Expectations 16
- The Public Expects Access to Higher Education
- The Public Expects Accountability
- The Public Expects Quality

Financial Constraints 18
- Limited State Resources
- Uncertain Level of Federal Support
- Increasing Need for Student Financial Aid

Access With Quality 22
- Enrollment Goal
- Enrollment Plan
- Systematic Review
- Enrollment Growth: 1997-2010
- Why the Board Chose This Goal

Solutions 26
- Focus on Learning
- Technology
- Partnerships
- Efficiency
- Student Financial Aid
- Investment
- Incentives

Challenges 34
- To the State
- To the Public Higher Education System
- To the Independent Institutions
- To Students
- To the HECB

A Brief History 39

Washington Higher Education System 40

List of Figures

Figure 1: Economic Impact of State Support 7

Figure 2: Educational Levels of Voters and Registrants 8

Figure 3: Mean Annual Earnings For Persons 18 and Older 9

Figure 4: Poverty Rate by Education Level 9

Figure 5: Federal Income Taxes Paid 10

Figure 6: Population Forecast for 17-25 Year Olds 11

Figure 7: Washington High School Graduates Forecast 11

Figure 8: Population Growth by County 1990-1995 12

Figure 9: Washington Families Living in Poverty 12

Figure 10: People of Color, Age 17-25 13

Figure 11: Differences in Median Family Income 13

Figure 12: Job Openings by Training Level, 1995-2010 14

Figure 13: Increased Workforce Productivity 14

Figure 14: Occupations with Highest Number of Projected Annual Openings 15

Figure 15: Change in Real Wage Income 16

Figure 16: Percentage of Public Assistance Recipients 17

Figure 17: Higher Education Budget 18

Figure 18: Allocations of State General Fund 18

Figure 19: Percent Increase in State Revenue 19

Figure 20: Types of Financial Aid 20

Figure 21: Number of Financial Aid Applicants 20

Figure 22: Volunteering and Giving 21

Figure 23: Return on Aid Investment 21

Figure 24: 1996 Master Plan Enrollment for the Washington Higher Education System 22

Figure 25: Additional Enrollment and Financial Aid State Costs for Plan Implementation 32

BEST COPY AVAILABLE

The Higher Education Coordinating Board (HECB) was established in 1986 to provide planning, coordination, monitoring, and policy analysis for higher education in the State of Washington. The HECB also administers and coordinates the state's program of student financial aid and related policy, research, planning and accountability functions. The Legislature intended through RCW 28B.80.320 that the HECB represent "the broad public interest above the interests of the individual colleges and universities."

Executive Summary

Benefits of Higher Education

Higher education returns a variety of benefits to individuals, families, society, and the economy. For example, studies show that for each $1 of state money invested, universities generate $9-$10 of spending. Individuals who continue their education after high school earn more, retain the value of their earnings over time, and are less likely to live in poverty or receive public assistance. More highly educated citizens are more likely to vote, volunteer within their communities, and pay more taxes, based on their higher incomes, to support their communities.

Needs Impacting Higher Education

The state's 17-25 year old population will grow especially rapidly over the next ten years. The number of high school graduates is growing, while the student population is becoming more diverse and more financially needy.

The state's workplace is changing, and a growing number of jobs require education beyond high school. New workers need to know how to use sophisticated tools, work in teams, and compete in the international marketplace. Adult workers are increasingly seeking additional training to keep or improve their jobs, as employers encourage workers to upgrade their skills.

The public expects its higher education institutions to provide access to a quality education for their children.

Funding from the state will continue to be constrained and the federal government seems likely to reduce its role in many areas.

The Board's Enrollment Plan

To meet the state's access needs, the Board's **enrollment goal** is for the state to reach the 70th percentile participation rate for upper-division and graduate/professional enrollments by 2020. Lower-division growth will continue to maintain the current participation rate. An interim goal of reaching the national participation rate in upper-division and graduate/professional enrollments by 2010 will add over 84,000 FTE students and will provide an important benchmark of progress made toward the long term goal.

From 1997-2010, the Board's **enrollment plan** proposes to increase enrollments at the main campuses to physical capacity, build branch campuses based on current development plans, and expand centers in high-demand or underserved areas. Community and technical colleges and independent institutions will also grow to maintain their current participation rates. **These actions will increase enrollment by nearly 57,000 students. However, more than 27,000 ADDITIONAL FTE students will still need to be served by 2010.**

Solutions and Challenges

The Board proposes a variety of solutions to be used in serving the additional students: focus on learning, technology, partnerships, efficiency, student financial aid, investment and incentives.

The Board also issues challenges to the state, students, institutions and itself for finding ways to serve these students. The Board:

- Challenges the **state** to fund a) new enrollments b) technology, c) the Fund for Innovation, and d) a study of costs and benefits of diverse delivery options;

- Challenges **public two- and four-year institutions** to a) increase access to quality learning and submit a plan to accomplish this that addresses restructuring, use of technologies, partnerships, and other means of providing quality learning at lower cost; the plan should propose enrollment and efficiency goals against which progress on the plan can be assessed;
  b) constantly innovate and respond to changes in the workplace including ways to improve productivity;
  c) report outcomes of efforts to restructure, improve student learning, and other mission-related activities;
  d) achieve statewide goals set forth by the Board for people of color and students with disabilities;
  e) forge new partnerships, reduce boundaries, and support K-12 restructuring;
  f) increase the proportion of community college students who are prepared to continue their education at the baccalaureate level.

- Challenges **independent institutions** to increase access for Washington residents and to collectively submit a plan that details a) where, b) when, and c) how many students can be served, plus d) the cost of providing these services.

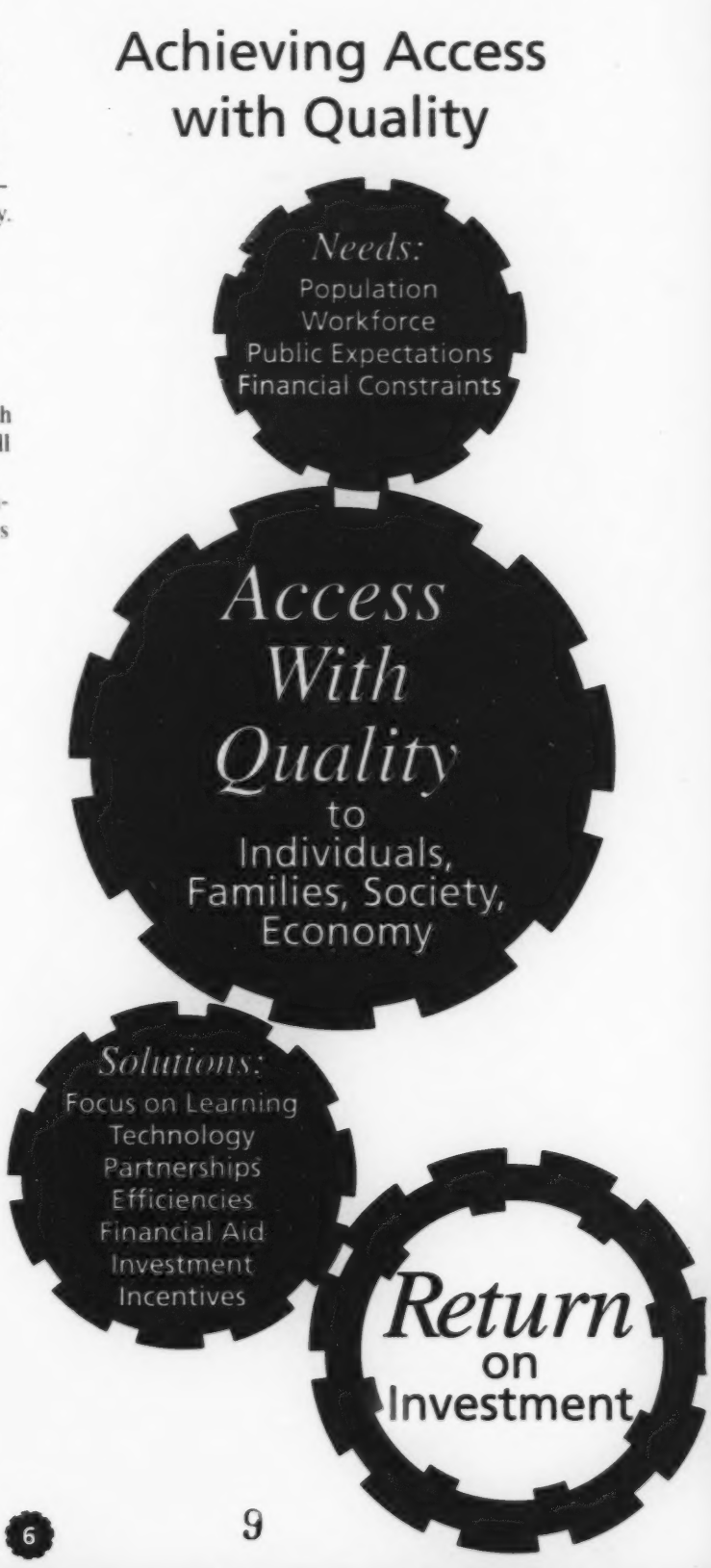
- Challenges **students** in K-12 schools to prepare for additional education by setting high expectations for themselves and completing demanding coursework, and students in post-secondary education to identify their goals and pursue them efficiently, achieve their highest potential, and contribute to society;

- **Accepts** the challenge to a) take a leadership role in conveying the needs of higher education, b) encourage innovation and continually pursue productivity improvements, c) convene a "Blue Ribbon Committee" on financial aid, d) develop and administer incentive programs funded by the legislature that will help institutions restructure, e) contract for a study of costs and benefits of diverse delivery options, and f) provide leadership in encouraging partnerships, reducing boundaries, and supporting K-12 restructuring.

The Challenge for Higher Education

Higher education in Washington is at an important crossroads. The arrival of the long-predicted "baby boom echo" and the demands of the workforce have precipitated a crisis of access. How we rise to the challenge of creating access with quality rests in part on our ability to make the case that higher education is an investment we cannot risk losing. Investment creates opportunity that reaps a return—to families and individuals, and to the economy and society. This return is higher education's ultimate payoff.

In this master plan, we will outline the needs that are driving demand for greater access to higher education. We will make the case that Washington should continue its commitment to providing higher education opportunities for an increasing proportion of its citizens. We will set forth an enrollment goal and plan, and identify solutions that will help create access. Finally, we will issue challenges to the state, to the public higher education system, to the independent institutions, and to students, and make public the ways we are ready to translate our commitment into action.



Return on Investment to Individuals & Society

What is the economic impact of higher education? Studies show that the total impact far exceeds the amount invested. A state recovers its investment in two ways. First, graduates become and stay employed, earn more money, and pay more taxes. Second, institutions attract non-state funds which, when coupled with state funds, generate spending far greater than would just the state funds alone. The increased economic activity (e.g., spending, jobs, goods and services, etc.) constitutes the return on investment. The money the state spends on universities generates spending nine to ten times the original investment. Several recent studies have estimated the impact of a state's investment in higher education.

● **Ohio.** A 1993 study commissioned by Ohio's 15 public universities and medical colleges found:

For each $1.00 of Ohio state tax investment in the universities, $9.01 of spending was generated.

● **Colorado.** A 1995 study prepared at the University of Colorado produced similar findings:

For each $1.00 of state tax investment in the University of Colorado, $10.33 of spending was generated.

● **Washington.** A 1994 study by the University of Washington found that in 1991-92:

For each $1.00 of state tax investment in the University of Washington, $9.91 of spending was generated.

The University of Washington's activities brought to the institution almost four times as many more non-state dollars ($1.27 billion) as the state invested ($348 million), for a total of $1.62 billion. This additional income came from federal and private grants and contracts for research; medical centers' revenues; student fees; gifts and endowments; auxiliary activities associated with university operations; investment income; and various other sources. Using the study's economic multiplier of 2.13, the estimate of higher education's economic impact, the total investment in the University of Washington ($1.62 billion) had a $3.45 billion ($1.62 billion x 2.13) impact on the economy, "kick-started" by the $348 million state investment. (Fig. 1)

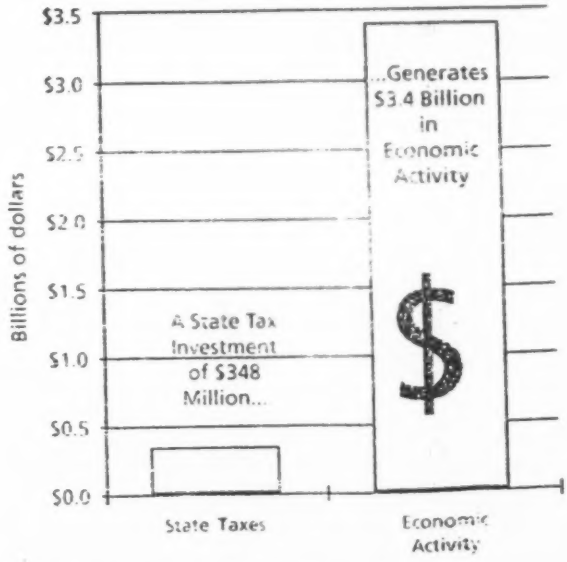
Because other universities and colleges in the state have different missions, the same economic impact found in the UW study should not be presumed. The university's medical centers and research activities provide revenue streams unparalleled at the other institutions. Even so, at the other public four-year institutions, non-state support is approximately 2 1/2 times the state support, while in the community and technical college system, non-state support is slightly more than the level of state support. Nonetheless, the return on investment is substantial, yielding economic impacts four to five times the investment made by the state.

Researchers at Washington State University used 1990 Census data for Washington State to determine the average rate of return for each level of education. Based on the individual's likely earnings over a lifetime of employment, the highest average rate of return results from the state's investment in secondary education (22.2% for males and 13.7% for females). However, the rate of return to a four-year college education (12.5% for males and 9.8% for females) is still higher than the interest rates on such investments as a ten-year Treasury Bill (9.3%). Furthermore, the college graduate's higher wages will result in "lifetime earnings" that are over half a million dollars more than those for high school graduates. This earnings "dividend" will generate increased returns to the state as property taxes and local and state sales taxes are paid.

And an analysis recently done at the UW suggests that the state receives directly – in state taxes – an additional return of at least $6,000 above the costs that it expends for each publicly educated baccalaureate graduate.

Return on Investment

Figure 1
Economic Impact of State Support for the University of Washington



Source: University of Washington Economic Impact Study, 1994

Return on Investment to Individuals & Society

● Massachusetts

A 1993 study conducted by the University of Massachusetts at Boston used a different approach to assessing return on investment. That study projected the increased lifetime earnings of the 1991 entering class resulting from their additional education, and the estimated state taxes they would pay on those earnings. Allowing for non-graduates and for those who would leave the state, as well as discounting the value of future tax revenue to current values, the study found that the state would receive $1.57 for each dollar invested in instruction for that class.

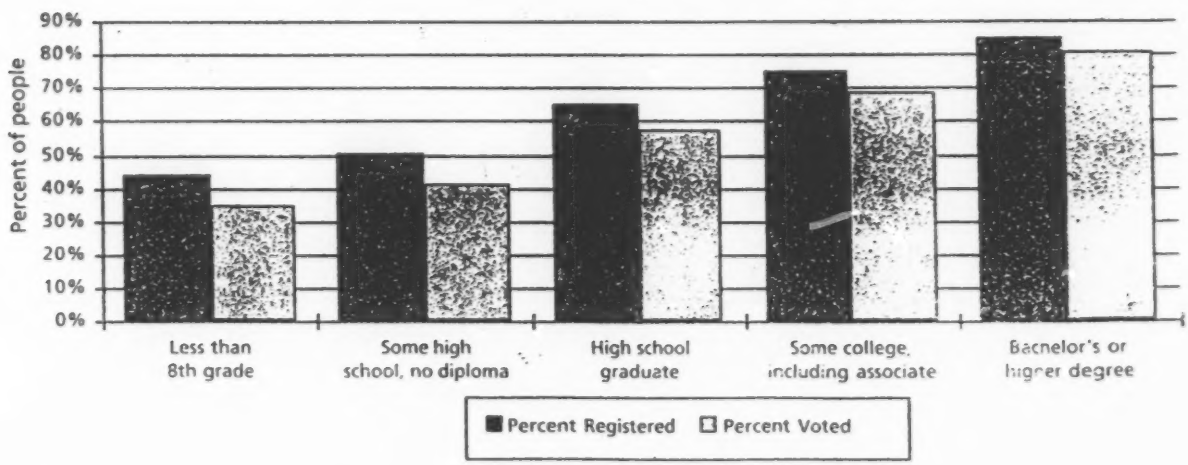
More Returns...

Still other economic returns are not captured by these studies. Colleges and universities attract new businesses to an area, and assist other already established businesses to grow and prosper. They help to create a well-educated workforce, and provide thousands of jobs. Strategically located throughout the state, they enhance the economy of many cities and towns.

Finally, all of the returns on the state's investment are not solely economic. Society is enriched by the creation and transmission of knowledge, and by citizens with greater tolerance of diversity and participation in civic activities. Citizens gain access to libraries, cultural activities, and athletic events. Individuals benefit from greater career flexibility, higher lifetime earnings, and the intellectual skills to make informed choices. (Figs. 2-5) Throughout this master plan, examples of different kinds of returns on investment will be illustrated.

Return on Investment

Figure 2
Educational Levels of Voters and Registrants
1992 National Election

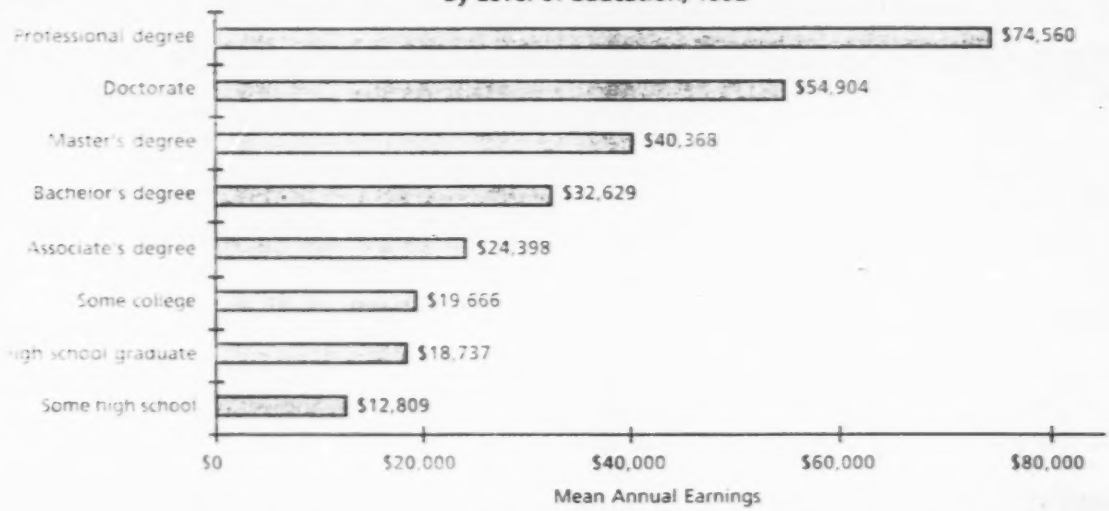


The more education a person has, the more likely he or she will participate in the democratic process. Those with more education are more likely to register to vote and vote.

Source: Voting and Registration in the Election of November 1992, U.S. Dept of Commerce, Bureau of the Census, 1993

Return on Investment to Individuals & Society

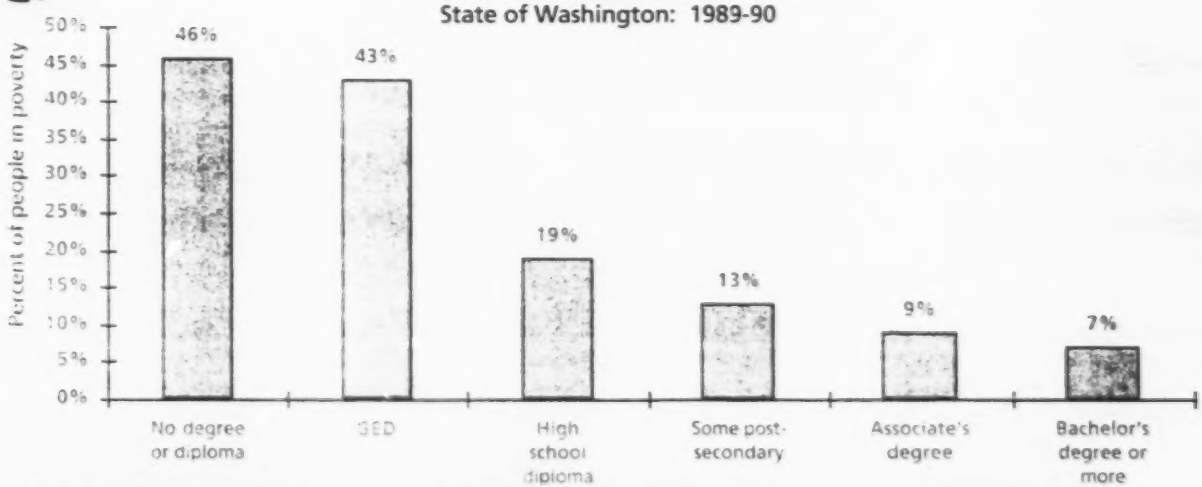
Figure 3
Mean Annual Earnings for Persons 18 and Older
By Level of Education, 1992



Studies have consistently demonstrated that people with more education earn more money. Furthermore, a recent study by the University of Michigan documented the "sheepskin effect"—the increase in income associated with a degree. The study provided new evidence that those who earned a degree earned more money than those who had similar years of education, but no degree or diploma.

Source: Census Bureau, "More Education Means Higher Career Earnings," November 1994; University of Michigan Population Studies Center, 1994

Figure 4
Poverty Rate by Education Level
State of Washington: 1989-90



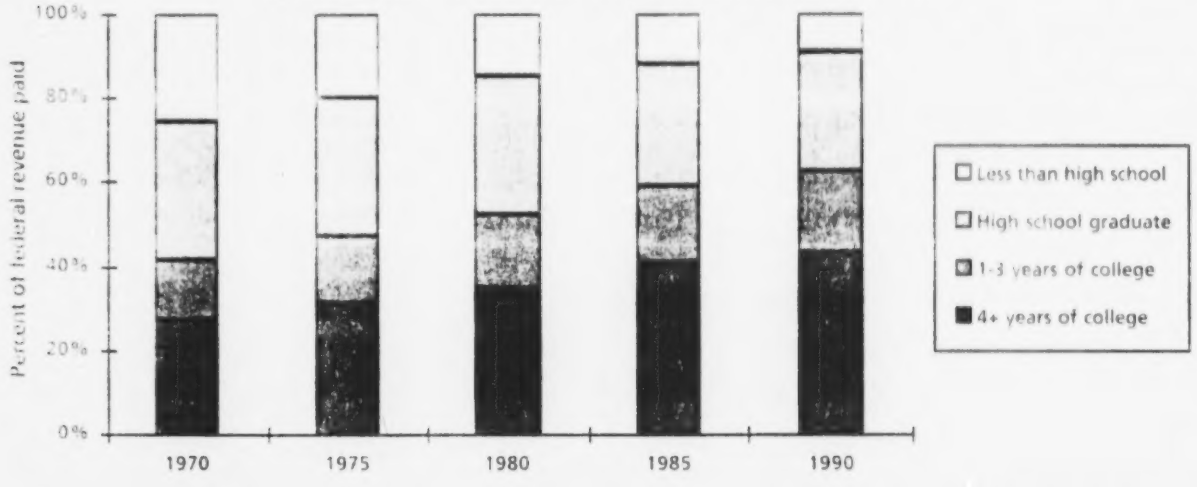
People with more education are much less likely to live in poverty. For example, in 1989-90, 46% of Washington residents with no degree or diploma were living in poverty. Education offers a way to avoid poverty, or to get out of it.

Source: Family Income Study: Washington State Institute for Public Policy, November 1991

BEST COPY AVAILABLE

Return on Investment to Individuals & Society

Figure 5
Distribution of Federal Income Taxes Paid
by Educational Attainment of Head of Household 1970-1990

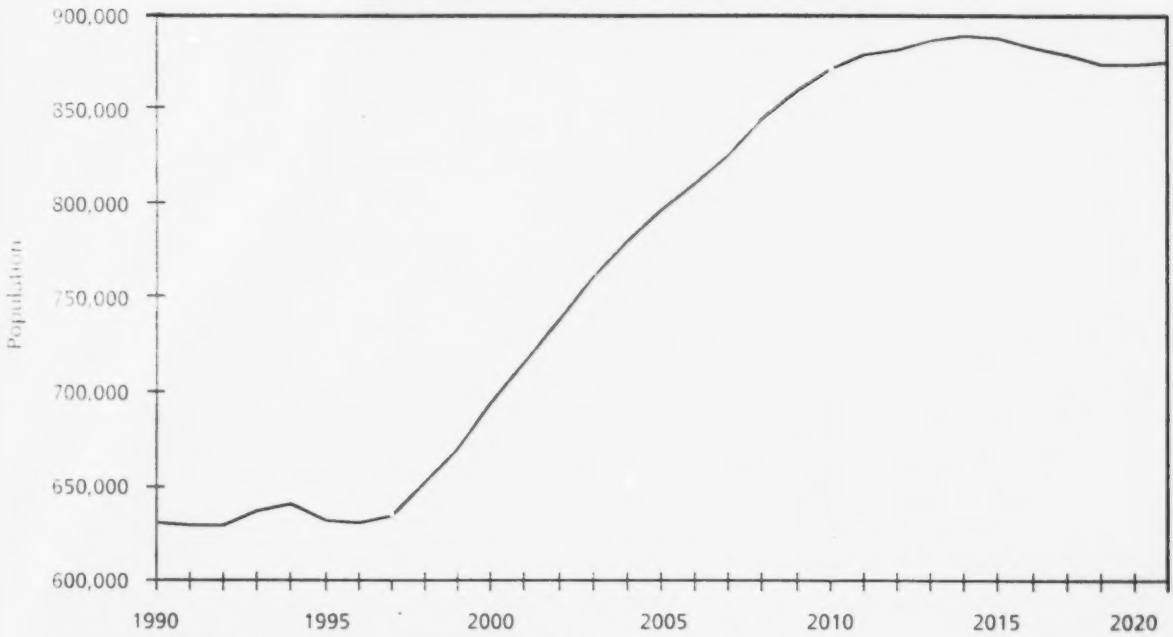


People with more education are likely to earn more money and pay more taxes. In the last 20 years, the proportion of the federal tax burden shouldered by college graduates has gradually increased.

Source: Mortensen Research Letter on Public Policy Analysis of Opportunity for Postsecondary Education, October 1994

Population Needs

Figure 6
Population Forecast for 17-25 Year Olds

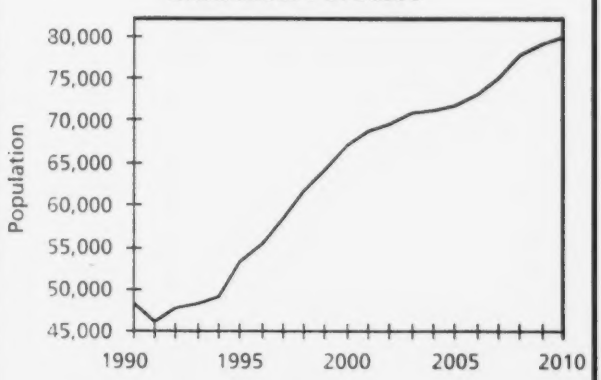


Source: OFM Population Forecast, November 1995

Growing 17-25 Year Old Population

Between 1995 and 2020, the number of 17-25 year olds (the traditional age range for most college students) is projected to increase by 32%. (Fig. 6) High school graduates (from both public and private schools) are likely to increase by 49%, from 53,000 in 1995 to 79,000 in 2010. (Fig. 7) After 2010, no substantial decline in either the population of this age group or of high school graduates is expected through 2020, which is as far as projections are practical. Demand for higher education will escalate as the population of this college-bound age group swells.

Figure 7
Washington High School
Graduates Forecast



Source: WICHE, High School Graduate Projections, 1992

Population Needs

Areas of Growth

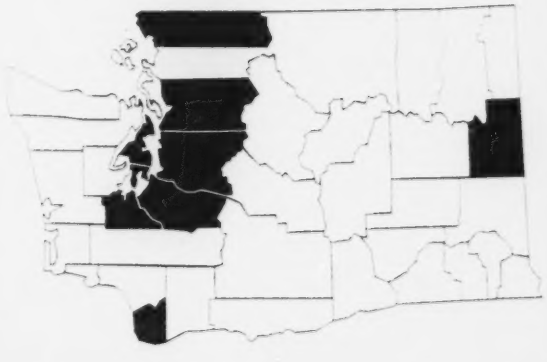
Between 1990 and 1995, Washington's population increased by over 560,000. Nearly 75% of the growth (410,000 people) occurred in only eight counties: Clark, King, Kitsap, Pierce, Snohomish, Spokane, Thurston, and Whatcom. The counties with the largest increase are shaded on the map. These counties are the primary source of students for the following branch campuses: UW-Bothell, UW-Tacoma, WSU-Vancouver, and WSU-Spokane. (Fig. 8)

Changing Demographics

More Financially Needy

The rise in the number of Washington families living in poverty reflects an increase in the number of poor nationwide. (Fig. 9) The poor are much less likely to be able to attend college. The burgeoning 17-25 year old population is expected to have greater financial need, following the trend that has become apparent in recent years. Demand for student aid will continue to grow, challenging the state and system to ensure that access stays within reach of those less privileged economically.

Figure 8
Population Growth by County
1990 to 1995



Counties increasing in population by 20,000 or more.

Source: OFM, 1995 Population Trends for Washington State, October 1995

Changing Demographics

More Diverse by Race and Ethnicity

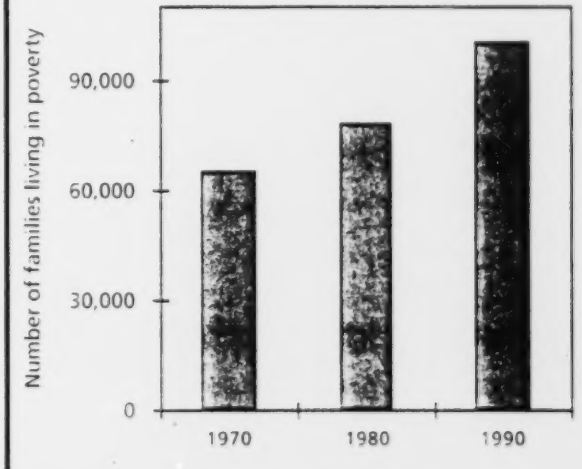
Washington has shown a strong commitment to diversity in higher education. Population trends in Washington mirror changes in the racial/ethnic composition of the population nationwide. (Fig. 10) People of color accounted for one-fourth of the state's population growth between 1990 and 1994. As the state becomes more racially and ethnically diverse, progress toward statewide goals for participation by people of color and for diversity, adopted by the Higher Education Coordinating Board in 1991 and revised in 1995, will require sustained commitment from the state and system.

Changing Demographics

More Diverse by Disability

Washington has also shown a strong commitment to serving students with disabilities in higher education. Recent state (Core Services Bill) and federal (Americans with Disabilities Act) legislation and gubernatorial direction (Executive Order 93-07) have paved the way for greater access to higher education. The Higher Education Coordinating Board's statewide higher education goals for students with disabilities challenge the system to enroll greater numbers of students and integrate them throughout the entire fabric of college life. The goals challenge the state to help provide the accommodations that will make full participation a reality.

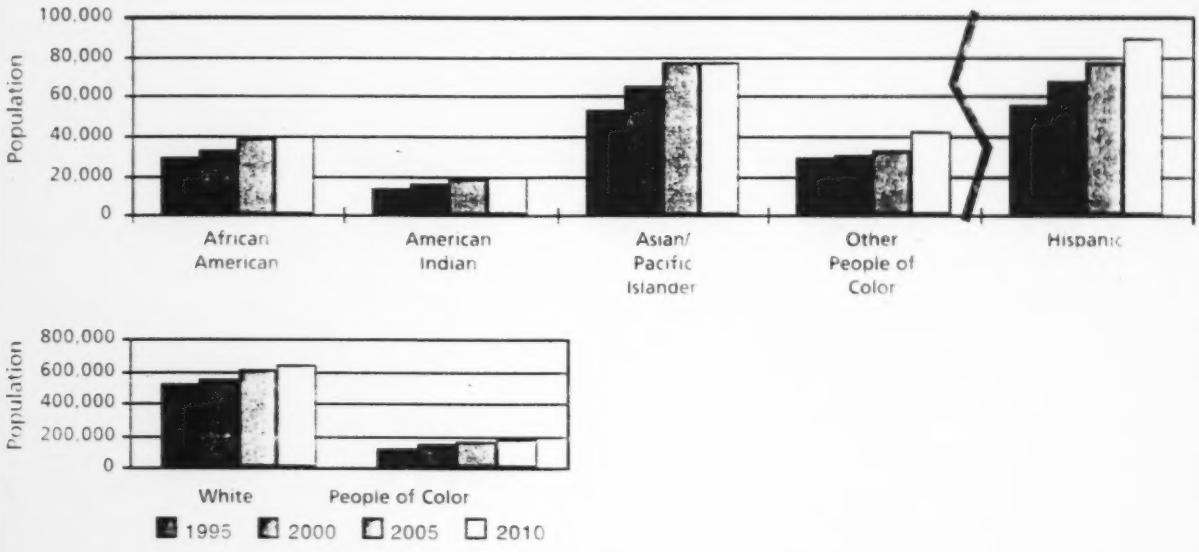
Figure 9
Washington Families Living in Poverty



Source: OFM, Demographic Context for Higher Education, 1991

Population Needs

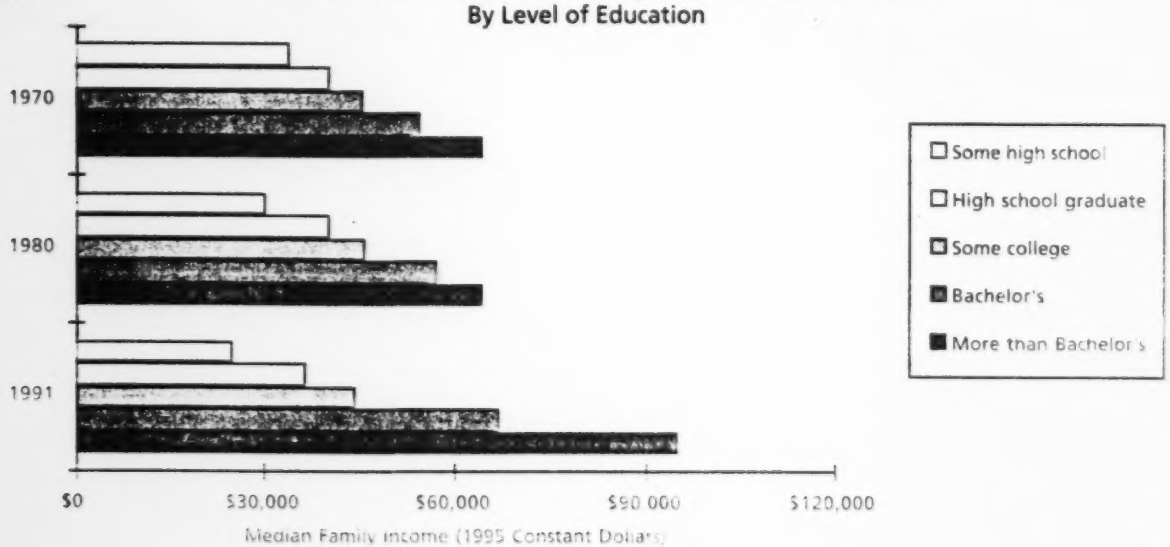
Figure 10
People of Color, Age 17-25



Note: Information about Hispanic origin is collected separately from information about race. Persons of Hispanic origin can indicate any race.
Source: OFM, Age-Race-Sex Forecast, June 1993

Return on investment

Figure 11
Differences in Median Family Income Nationwide
By Level of Education



The disparity in earnings between high school and college graduates has widened over the last two decades.
Source: U.S. Bureau of Census

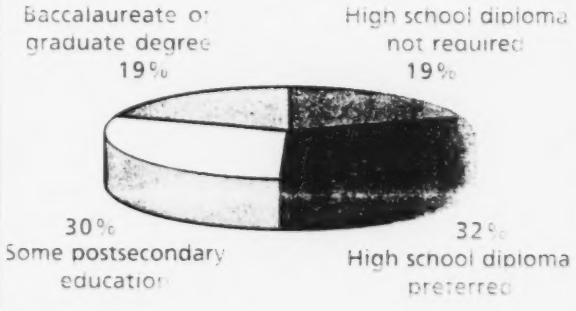
Workforce Needs

The Changing Workplace

The workplace of the 21st century will demand different knowledge and skills of its workers, as rapid changes in technology and communication dramatically alter the work environment. Witness the impact of the computer: once a novelty, now commonplace in the home and workplace. More than half of employed adults polled in a recent national survey reported using a computer at work; one third had computers at home. From the mechanic's garage to the executive's office, technology is transforming the workplace.

Employers need workers who know more than how to use sophisticated tools, however. Perhaps the greatest change in the workplace is the need for "knowledge workers"—workers who require formal education and continuous, lifelong learning. Employers are looking for workers who can work in teams and convey information clearly; who can gather, organize and analyze data; and who can think critically and systemically. They want workers who can solve problems creatively and know how to learn. They need workers who can help businesses compete in an international marketplace. In short, they want workers who have the knowledge and skills that higher education has long helped students develop. Perhaps it is not surprising, then, that **almost half of the job openings in Washington over the next 15 years will require education beyond high school.** (Fig. 12)

Figure 12
Job Openings by Training Level
1995-2010



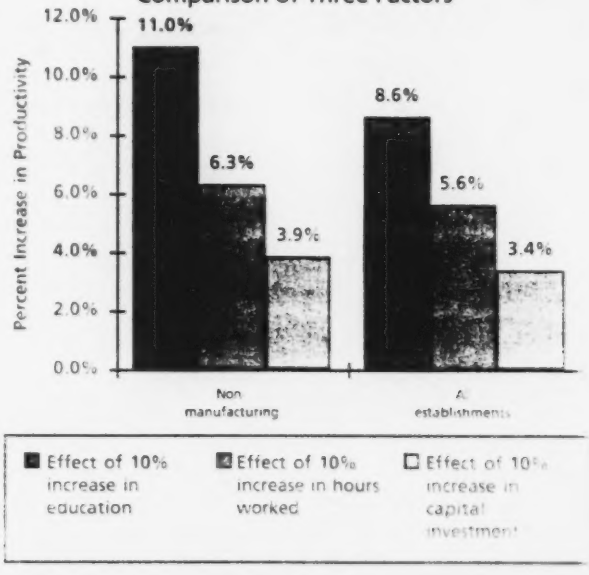
Source: Washington State Employment Security, Occupational Outlook 1995-2010, 1995

As the educational requirements of the workplace rise, workers will increasingly need access to all levels of higher education to meet the entry-level requirements of the professions to which they aspire. Currently, Washington ranks 12th among the 50 states in the proportion of the state's population who are 25 and older and have a baccalaureate degree. On the surface, twelfth looks good—the educational attainment of Washington's adult population is relatively high.

But where are they being educated? Washington's participation rate in baccalaureate education is low (ranking 47th) compared to the other states. The contrast between the relatively high number of educated adults and the relatively low number of students pursuing baccalaureate education suggests that Washington has been attracting an educated population from outside the state to meet its labor market needs.

Return on Investment

Figure 13
Increased Workforce Productivity
(Non-Manufacturing and all Establishments)
Comparison of Three Factors



According to a study conducted by the University of Pennsylvania, "A 10% increase in the average education of all workers within an establishment (equivalent to slightly more than one additional year of schooling) is associated with an 8.6% increase in output for all industries, other things being equal. This effect rises to 11% for the non-manufacturing sector." Most jobs in Washington are in the non-manufacturing sector.

Source: National Center on the Educational Quality of the Workforce, 1995

Workforce Needs

Washington is not preparing enough of its own citizens to take advantage of the wide range of jobs that require a highly skilled workforce—jobs that the state, because of its solid base of high technology, telecommunications, aerospace and other industries—is uniquely prepared to offer. The technology of the "information age" and the higher and continuous learning requirements of "knowledge" work put greater and very different demands on higher education.

Demand for Retraining

Workers and employers understand the growing need for employees to continually upgrade skills. In a 1995 survey of Washington residents, respondents chose "training or retraining workers for needed occupations" as the most important objective of higher education. The findings suggested that the number of potential new students seeking workforce retraining could reach 50,000 in just three or four years. Similarly, a 1995 national study found that over half of the employees surveyed, age 30-49, felt that additional training was "definitely" important for them to be successful in their work. In fact, more than 80% of the respondents in this age group reported having already undertaken work-related training in the last three years. The study concluded that "the increasingly common decision to continue getting an education reflects the pressures of working in a knowledge-based economy." (Sources: MGT of America, Inc./Elway Research, Inc.; Social and Economic Sciences Research Center, Washington State University)

The emphasis on retraining is confirmed by employers. Surveys of Washington employers were recently conducted by the Department of Community, Trade, and Economic Development and by the Workforce Training and Education Coordinating Board. The employers indicated that 57% of their current employees would require some type of retraining in the next five years in order to retain their current jobs, with approximately half of those in classroom settings.

Return on Investment

Figure 14
Occupations with Highest Number of Projected Annual Openings
by Level of Education, 1995-2010

	Median Weekly Earnings
High School Plus Training	
Salespersons, retail	$283
Waiters/Waitresses	$256
Office Clerks	$372
Child Care Workers	$158
Secretaries	$383
Some Postsecondary: 2-3 Years or Apprentice	
Managers/Administrators	$658
Supervisors, sales	$501
Carpenters	$424
Professionals/Para-Professionals/Technical	$671
Supervisors, clerical	$539
Baccalaureate or Graduate Degree	
Registered Nurses	$682
General Managers, Executives	$851
Teachers, secondary	$690
Systems Analysts	$846
Computer Engineers	$846

People with more education earn more and may choose from a much wider array of job possibilities. Studies have found that workers who have more education than the job requires earn more than colleagues with less education doing the same job.

Source: Washington State Employment Security, Occupational Outlook 1995-2010, 1995

BEST COPY AVAILABLE

Public Expectations

The Public Expects Access to Higher Education

Two recent surveys confirm that the public expects access to higher education. A 1995 study conducted by MGT of America and Elway Research, Inc. polled 800 Washington residents for their opinions about Washington's higher education system. A sampling of their responses attest to the importance Washington citizens place on higher education—and on their access to it.

- Fewer than one in ten respondents felt that a high school education alone was sufficient to function effectively in today's world.
- Over 90% of those with children living at home expected their children to continue their education beyond high school.
- Three-fourths of those with children at home wanted their children to attend college in Washington state; almost all thought their children would be able to do so.
- Four in five (81%) thought that paying taxes in Washington state entitled citizens to access to college or vocational school.
- Most (80%) thought that every qualified Washington resident had a right to attend an institution of education beyond high school, regardless of income.

Similarly, a 1994 survey of Washington residents sought to determine their familiarity with and attitudes toward the state's community and technical colleges. When asked to rate the importance of addressing 12 different educational and social issues at community and technical colleges, the three top-ranked responses were: 1) helping students learn job skills (91% rated as important), 2) offering affordable tuition (87%) and 3) **providing greater access to higher education for Washington residents** (83%). (Source: Market Trends, Inc.)

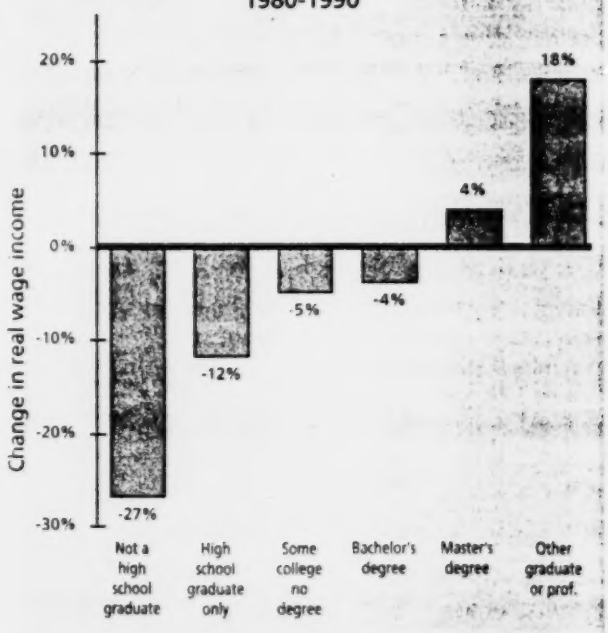
The Public Expects Accountability

Every Washington resident invests tax money in public higher education. Parents and students invest their tuition dollars, as well. All are interested in knowing that the money is being spent wisely.

The Legislature has responded to the public's expectations. For example, in 1989 the Legislature invested in a program of assessment at all of the public institutions that has become a nationally recognized model. It has been successful in generating a "culture of evaluation" in which the quality of learning is continuously improved. In 1993, the Legislature focused on the efficiency of the system by requesting the Higher Education Coordinating Board to coordinate faculty workload and time-to-degree studies. Both resulted in institutional initiatives to improve the productivity of the system. Institutions have also responded to expectations for accountability by evaluating and reporting on measures of some of their activities.

Return on Investment

Figure 15
Change in Real Wage Income
of Washington Residents by level of Education, 1980-1990



A difficult economy in the past decade has dramatically affected personal income. Between 1980-90, those people with the least education suffered the most financially.

Source: OFM, Washington Trends, July 1995

BEST COPY AVAILABLE

Public Expectations

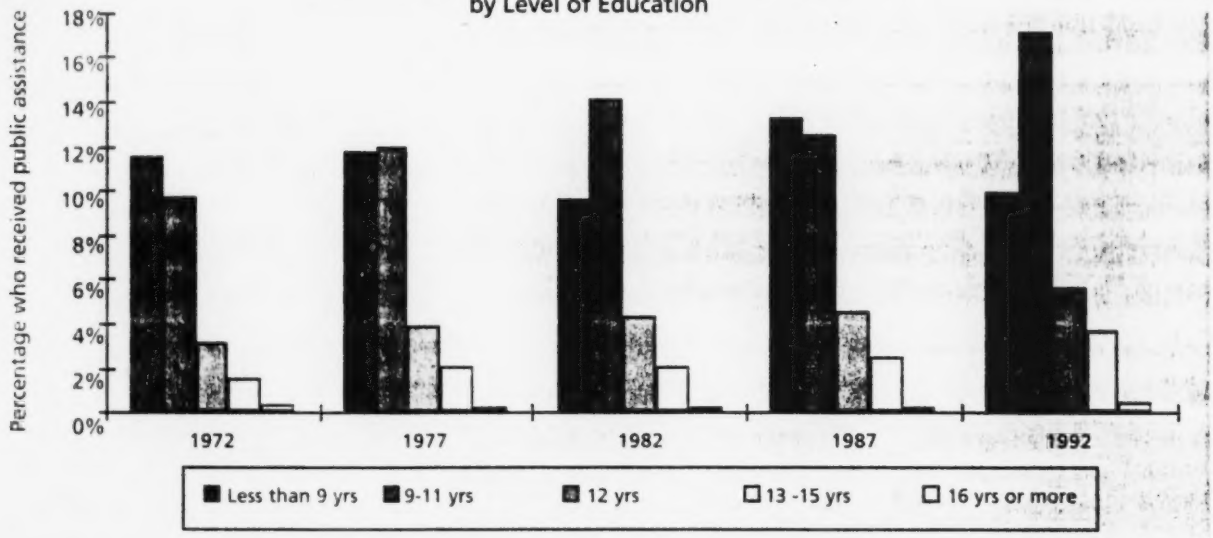
The Board believes that the most effective way to approach accountability is for the state to make clear what results it expects, and then to concentrate upon measures of those outcomes which will demonstrate to the public when it is getting good value for its money. Public higher education is currently working to put in place a set of indicators that will more fully meet public expectations for accountability.

The Public Expects Quality

No amount of investment is worthwhile if it does not produce a quality product. Therefore, it is important to ensure that citizens have access to quality programs and that quality is defined in terms of outcomes. These outcomes can be related to the student's actual learning (new knowledge or skills) or they can be related to employment or other important consequences of earning a college degree. Finally, it is important to recognize higher education's mission in research and community service. Both are closely related to the quality of education and the quality of life in the state. High quality research makes a fundamental contribution to the increase of knowledge, to the solution of society's problems, and to the economy of the local communities and the state.

Return on Investment

Figure 16
Percentage of Public Assistance Recipients
by Level of Education

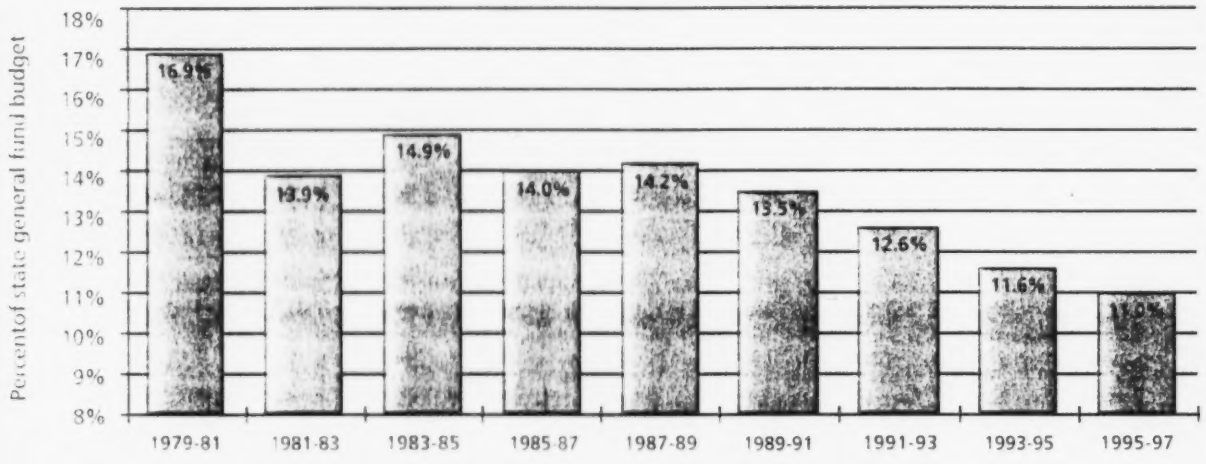


One cost of poverty is the high demand on social services, services which people with high levels of education are much less likely to need.

Source: National Center for Education Statistics, The Condition of Education, June 1995

Financial Constraints

Figure 17
Higher Education Budget
As a Percent of Total State General Fund Budget

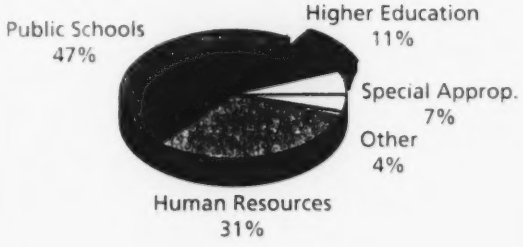


Source: HECB and Legislative Evaluation and Accountability Program Committee, 1995

Limited State Resources

Fiscal constraints recently imposed on state government have limited state general fund expenditures. In 1995, for the first time in five years, competing demands on the state general fund caused the Board-recommended enrollment goals not to be funded. For the 1995-97 biennium, funded enrollment increased by only 1.3%, as opposed to a 5.7% increase during the 1993-95 biennium. Even before this, increasing pressure upon state resources compressed the higher education budget. Higher education has seen its portion of the state's spending decrease considerably over the last 15 years, falling from approximately 16.9% in 1979-81 to 11% in 1995-97. (Figs. 17, 18) This situation is exacerbated by slower growth in state revenue in recent years relative to more rapid growth in population. (Fig. 19)

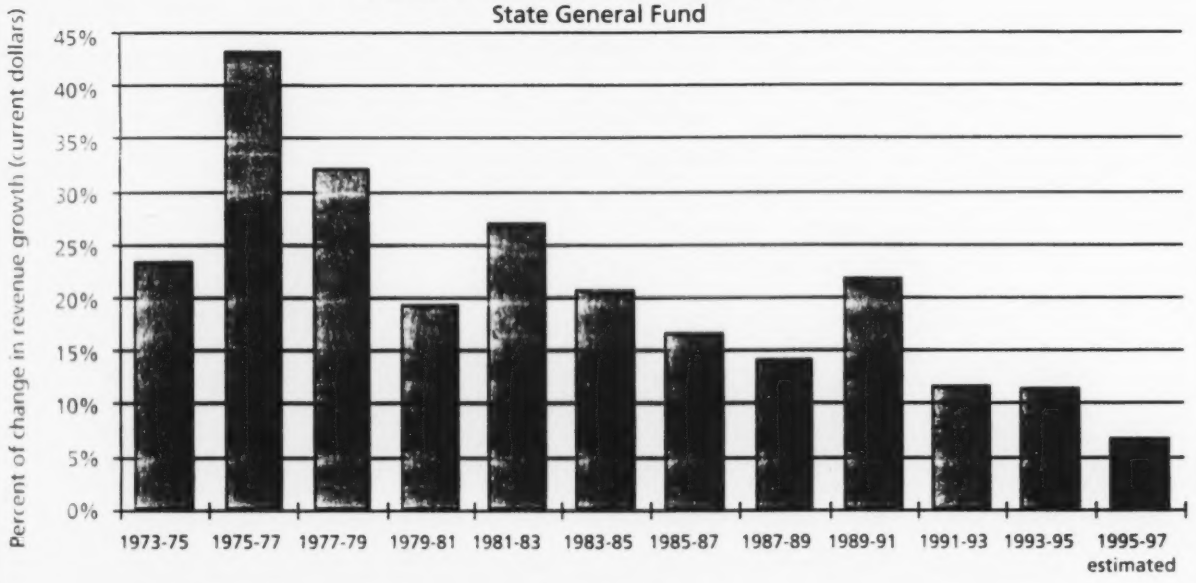
Figure 18
Allocations of State General Fund
1995-1997



The state's general fund is currently allocated across a number of areas of state government.
Source: LEAP, 1995

Financial Constraints

Figure 19
Percent Increase in State Revenue
State General Fund



Biennial (2-year) growth in state revenue has slowed.
Source: Washington State Office of Forecast Council, 1995

Uncertain Level of Federal Support

Federal assistance to higher education is provided primarily through research grants to institutions and financial aid to students. Both contributions are substantial. For example, in 1995-96, Washington institutions will receive an estimated $445 million in federal research monies. The federal government is also the largest source of student financial aid. In 1995-96 it will make available about $600 million or 77% of the $776 million in student aid for this state. (Fig. 20) About $483 million is in the form of federally guaranteed student loans.

As Congress works to balance the federal budget, serious discussions are taking place about reductions to federal student aid programs. While the President and some Congressional leaders have declared higher education and student aid to be special priorities, others have called for the elimination of nearly every grant and work program. Thousands of students would be affected, and the burden of financing the costs of college attendance would shift to other partners in this enterprise: students and their parents, the state, institutions, business and philanthropic organizations. Low-income students, the primary beneficiaries of the grant program, would be most adversely affected.

Many other state agencies outside of higher education receive federal dollars, as well. Reductions in federal assistance to the state in other areas would result in an unprecedented demand on state resources and make the state even more hard-pressed to compensate for losses in federal student aid.

Financial Constraints

Increasing Need for Student Financial Aid

Growing demands for state student aid will be felt as the new cohort of 17-25 year olds begins to enter the post-secondary system. This demand, however, is not just in the future. Student aid applications have increased by one-third over the past three years (Fig. 21), while enrollments grew only 12%. The 49,000 new applicants reflect both an increasing proportion of students from low-income families and higher public expectations for assistance.

State Need Grant (SNG) and State Work Study (SWS) programs have been unable to keep up with the needs of students. The SNG program is designed to serve the state's lower and lower-middle income students while the SWS program serves any student with need, not only the lowest income levels. The primary funding goal of the SNG program is to serve all students whose family income is less than 65% of the state's median income (about $29,000 for a family of four). Even with significant recent increases in state funding, need outpaces availability.

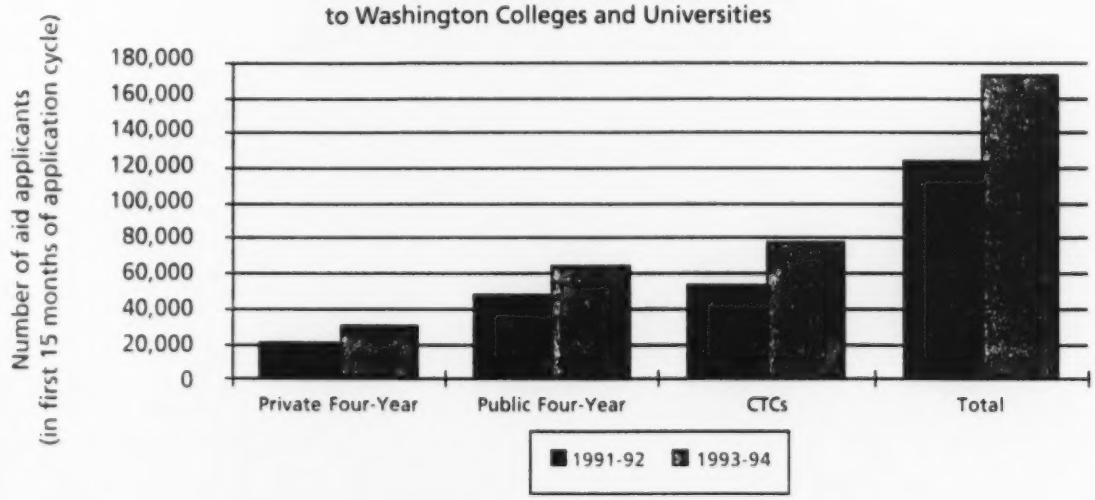
In 1994 and 1995, SNG funds were adequate to serve families whose incomes were less than 50% of the median. In 1996, despite an increase of funding, the statewide eligibility cutoff is at about 45% of the median family income (about $19,800 for a family of four). The cutback in eligibility is due in part to the rapidly expanding number of eligible, low-income students who are requesting assistance.

Figure 20
Types of Financial Aid
Available to Washington Students
1995-96 estimate

Total = $776 Million

Need based – $610 million
Non-need based – $166 million
Source: HECB, 1995

Figure 21
Number of Financial Aid Applicants
to Washington Colleges and Universities

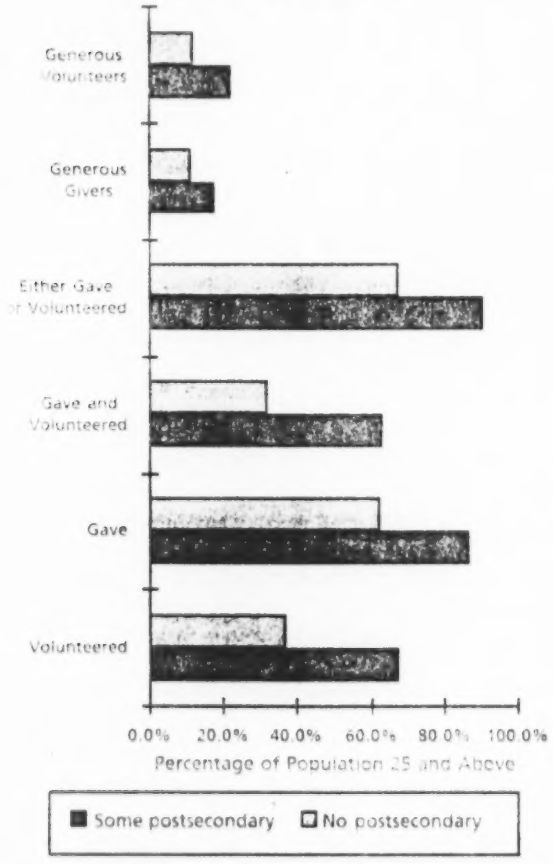


The number of aid applicants is growing (based on figures from applicants' first choice of institution).
Source: HECB, 1995

Financial Constraints

Return on Investment

Figure 22
Volunteering and Giving
Among the Population 25 and Older by Level of Education



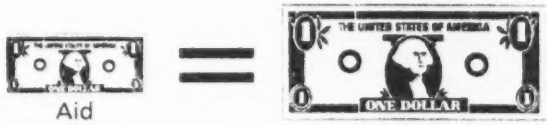
Giving time or money is a measure of the degree to which citizens share responsibility for the welfare of their community. In this survey, adults aged 25 years and older with some postsecondary education were twice as likely as those with less education to report both volunteering their time and making charitable contributions in the last 12 months.

Source: Biennial Gallup Survey on Giving and Volunteering, 1992

Funding for the State Work Study program has not increased for six years and has only increased once in the past ten years. The program not only helps students obtain valuable career-related experience, but helps them reduce their loan obligations and meet their financial needs. Interest expressed by students, employers and schools would support about $5 million per year in program growth, to increase by 2,500 the number of students assisted each year.

Return on Investment

Figure 23
For every dollar of student financial aid expended, $4.30 is returned in federal taxes.



Aid Expenditure = Return on Investment

Source: Edward P. St. John, "The Impact of Student Financial Aid: A Review of Recent Research," The Journal of Student Financial Aid, Vol. 21, No. 1 (Winter 1991), p. 26.

BEST COPY AVAILABLE

Access with Quality

Enrollment Goal

With this Master Plan, the Board endorses a long-term enrollment goal to achieve, statewide, a level of upper-division and graduate/professional enrollment equal to the 70th percentile when compared nationally. In 1990, the Board established its commitment to reach this enrollment level by the 2010. The Board remains committed to this level of enrollment, but has extended the timeframe for reaching that goal to the year 2020, based on a realistic assessment of the size of the demand.

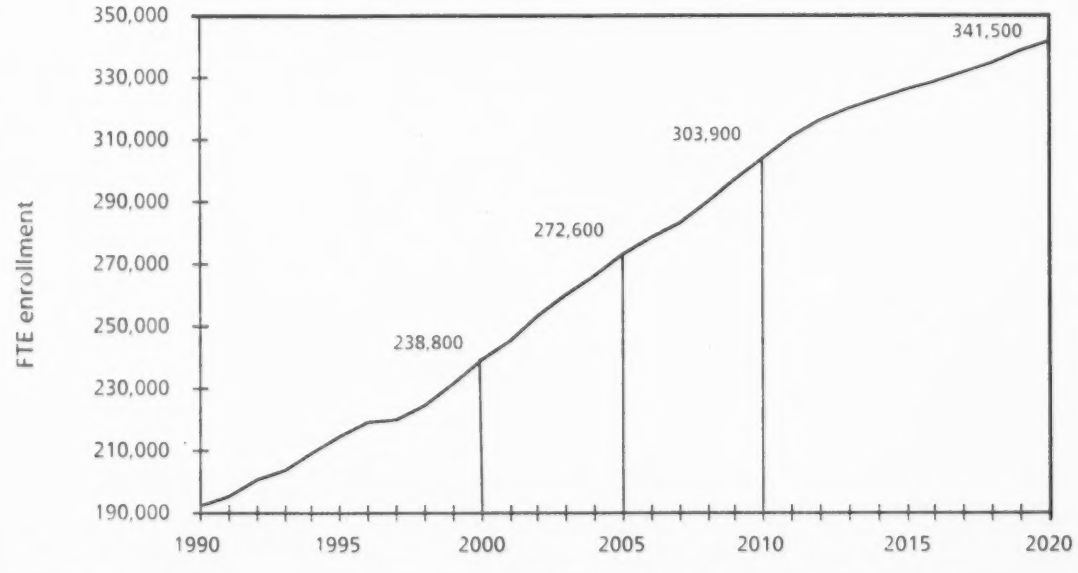
The Board also endorses increases in lower-division enrollment that would keep pace with our growing population at the current rate of participation. In meeting these goals, enrollment for the system as a whole (including lower- and upper-division, graduate and professional levels) will approach the 90th percentile when compared nationally. The highest levels of participation will continue to be at the lower-division level to reflect the needs of the workforce. The Board intends for Washington's level of participation, systemwide, to be among the top states in the nation by the year 2020.

Enrollment Plan

Because of the dramatic growth in the college-age population, two phases will be recommended to attain the enrollment goal. In Phase One, upper-division and graduate/professional access would increase to a level equivalent to the national participation rate* by the year 2010. By 2010, the state would provide its citizens with baccalaureate and graduate/professional opportunities roughly equivalent to the average of those provided elsewhere in the United States. Lower-division enrollment, substantially influenced by Washington's strong community and technical college system, would continue to maintain the current rate of participation.

In Phase Two (2010-2020), upper-division and graduate/professional access would continue growth to attain the 70th percentile, while lower-division increases would continue to keep up with population growth. By 2020, systemwide enrollment will approach the 90th percentile. (Fig. 24)

Figure 24
1996 Master Plan Enrollment for the Washington Higher Education System



* National participation rate is calculated by dividing total higher education enrollments nationwide by the number of people in the country aged 17 and above, and multiplying by 100.

Access with Quality

Achieving This Goal...

	HECB Goal Phase One (1997-2010)	HECB Goal Phase Two (2010-2020)
Lower Division	Current Participation Rate	Current Participation Rate
Upper Division	National Participation Rate	70th Percentile Participation Rate
Grad/Prof	National Participation Rate	70th Percentile Participation Rate

...Produces These Results

	Current Ranking	HECB Goal Phase One (1997-2010)	HECB Goal Phase Two (2010-2020)
Lower Division	11th Rank (80th Percentile)	11th Rank (80th Percentile)	11th Rank (80th Percentile)
Upper Division	47th Rank (8th Percentile)	29th Rank (44th Percentile)	16th Rank (70th Percentile)
Grad/Prof	43rd Rank (16th Percentile)	20th Rank (62nd Percentile)	16th Rank (70th Percentile)

Systematic Review

The Board's enrollment goal is based on the most current available information. However, many factors change in relatively short periods of time. These factors need to be taken into consideration and the goals, objectives, and calculations must be correspondingly adjusted. For example, additional demand exists to provide training and retraining for currently employed workers as skill requirements change in the workplace. Although the Board has not attempted to quantify this demand, it does recognize this additional pressure for access on the system. An annual review is planned, but unless forecasts change dramatically, a published review will occur once every four years in conjunction with the master plan update cycle. Systematic review, using the same methodology applied to the most current information (e.g., population forecasts, national participation rates, Washington participation rates), will help ensure that the goal will remain realistic, contemporary, and responsive to changing conditions.

BEST COPY AVAILABLE

Access with Quality

Enrollment Growth: 1997-2010

The enrollment growth recommended by the Higher Education Coordinating Board, for the entire system, totals **84,100 Full-Time Equivalent (FTE) students** between 1997 and 2010.

The system goal is listed below.

	1997*	2000	2005	2010
Washington State Enrollment Goal	219,800	238,800	272,600	303,900

In order to meet the demand for increased access, several things must occur. First, enrollment in the public two-year system and independent sector must increase by amounts that will at least maintain the current participation rate. These enrollment levels are displayed below:

	1997*	2000	2005	2010
Community/technical college system	111,700	117,100	126,700	136,100
Independent college and university sector	30,400	32,200	35,300	38,100

Second, the four-year public system has several strategies to employ to meet its portion of the enrollment goal. Between 1997-2010, the four-year public system must: 1) increase main campuses to institutional physical capacity at a rate associated with population growth, 2) increase branch campuses based on population growth, and 3) expand established education centers (baccalaureate degree programs offered by four-year institutions in locations away from the main campus) in high demand or underserved areas.

Near-Term Responses for the Public Four-Year Sector

	2000	2005	2010
1. Increase main campus enrollment to physical capacity at a rate equal to population growth	4,900	7,100	7,800
2. Increase branch campus enrollment funding based on population growth	3,300	9,600	14,900
3. Expand Centers in High Demand/Underserved Areas - increase enrollment to optimal capacity	400	1,200	1,900
Total — all options	8,600	17,900	24,600
Budgeted (FY 97) public four-year enrollment	77,700	77,700	77,700
Public four-year sector	86,300	95,600	102,300

* Based on participation rate model which does not reflect budgeted levels

Access with Quality

The following table summarizes the enrollment growth which the system can be expected to achieve, assuming growth to maintain the current rate of participation for the public two-year and independent sectors, and incorporating for the four-year sector the three options described in the previous table.

	1997*	2000	2005	2010
Community/technical college system	111,700	117,100	126,700	136,100
Independent college and university sector	30,400	32,200	35,300	38,100
Public four-year sector	77,700	86,300	95,600	102,300
TOTAL	219,800	235,600	257,600	276,500

The growth described in the table above accommodates 56,700 additional students by 2010, distributed by sector as follows:

The community/technical college sector	24,400 students
The independent college and university sector	7,700 students
The public four-year sector	24,600 students

Still, the projected enrollment levels fall short of the Washington State enrollment goal.

	1997*	2000	2005	2010
Washington State Enrollment Goal	219,800	238,800	272,600	303,900
Not currently accommodated in plan		3,200	15,000	27,400

The GOAL supports increasing enrollment by **84,100 FTE students**. If the recommendations mentioned above are followed, 56,700 students could be accommodated. If they are not, the number left unserved will grow. Between now and 2010, ways to accommodate 27,400 students beyond the above recommendations will need to be identified. Institutions will need to devise ways to serve more students and the state will need more information about both the costs and benefits of the various delivery mechanisms, locations, sectors, and technologies.

Why the Board Chose This Goal

The Board strongly believes that access to higher education must be increased in order for Washington to meet the expectations of its citizens and to help young people and adults participate successfully in the economy and society . Needs emerging from population growth, workforce conditions, and public expectations are increasing demand for higher education at a time when financial constraints are imposing limits on the state's resources. The Board recognizes the dilemma of these competing forces, but holds to the goal established by the 1987 Master Plan: To become one of the five best systems in the United States, as judged by the availability of the system to the population. By extending the time it will take to meet its 1987 commitment, the Board bows to fiscal reality while standing firm on its vision of access with quality.

* Based on participation rate model which does not reflect budgeted levels

BEST COPY AVAILABLE

Solutions

"Right now is the wrong moment for driving into the future with our eyes on the rear-view mirror."

Ivory Nelson,
President, CWU

The numbers tell the story. In order to meet the enrollment goal, the system must create access for over 84,000 FTE students by the year 2010. Three solutions for the public, four-year sector will address some of the near-term demand. The public four-year institutions can:

- increase enrollment at main campuses and centers to physical capacity,
- build branch campuses based on current development plans, and
- expand centers in high-demand or underserved areas.

Additional enrollments in the community and technical college and independent sectors will address some of it as well. Still, the system risks leaving over 27,000 students unserved. How we create access for them is the dilemma we all share. For in this case, "they" are really us. They are our children, our friends, our relatives, ourselves. If we do not create access, who will we leave out?

On the following pages, we offer a variety of ways to create access to meet our enrollment goal. We consider possible solutions: focus on learning, technology, efficiency, partnerships, financial aid, investment, and incentives. But the list is not all-inclusive, the solutions are not discrete, and we raise more questions than we provide answers. Our aim is to tap the creativity of the public higher education system, independent institutions, state, students, and Board to meet the challenge of access before us.

One thing is clear. The challenge of the future will be to find ways to improve productivity, to innovate, to experiment with new models of learning, and to explore creative ideas that have yet to be proposed. We will need to change continuously—because solutions for today may rapidly become the status quo of tomorrow. We will not have the luxury either to hold onto the past or to conduct "business as usual." *New solutions must be tried.* We look to the institutions to design approaches that will provide answers to the access challenge of the future.

Solutions

"Washington State University is evolving from an institution emphasizing teaching to an institution emphasizing learning."

Sam Smith,
President, WSU

FOCUS ON LEARNING

The coming transformation of education is signaled nowhere more clearly than in the emerging shift in focus from teaching to learning. The urgency of redesigning educational delivery for greater efficiency has accelerated the push to identify what students need to learn and how they can best learn it. It will be a challenge for higher education to design learning systems that allow students to learn — and to be evaluated on that learning — in ways other than the traditional terms, courses, and credits. These changes will be driven both by higher education's own realities and imperatives and by the changes already underway in K-12 education.

The shift to a focus on learning is already apparent on many campuses. For example, many two- and four-year colleges are using learning communities, and the curriculum at The Evergreen State College emphasizes integrated and active learning. Instructional technology on several campuses successfully reaches a wider variety of student learning styles than traditional teaching alone and highlights the benefits of a focus on learning. The community and technical colleges are developing competency-based programs in a number of technical / vocational areas. The new joint UW / WSU post-baccalaureate pharmacy program will begin with an evaluation of what practicing pharmacists already know and can do. It will then build individualized programs to meet the competencies required of the profession at the doctoral level. Furthermore, Washington's statewide assessment initiative has focused attention on identifying the necessary student learning outcomes for specific courses and degree programs. Seattle, Spokane, and Shoreline Community Colleges – among many others – have been leaders in this area.

The challenge is only beginning. *What kinds of learning are most successfully accomplished by various approaches? What are the student learning outcomes associated with success in a specific program? How can that learning be effectively and efficiently evaluated? What kinds of flexibility, encouragement, and incentives will motivate and enable faculty to design new educational delivery models? Eventually more questions will arise, such as: How would funding be different in a system based on learning rather than on units of instruction?*

Solutions

"There is never a map for unexplored territory."

Bill Gates,
The Road Ahead

TECHNOLOGY

Technology will affect higher education in ways we cannot yet imagine. It will challenge our assumptions about the very nature of education—what it is and how it occurs. Institutions are already experimenting with the use of technology to increase access and improve the quality of student learning. WSU has developed the state's first bachelor's degree program designed to be delivered to students living at a distance from main and branch campuses. The community and technical colleges have been using telecourses and have developed an Associate of Arts degree delivered entirely through this mechanism. WSU is one place where faculty have been experimenting with multimedia in general education courses. And at the UW, the UWired program has experimented with the use of computers to augment freshman interest groups (FIGs). On all campuses, student and faculty use of Internet and the World Wide Web has exploded.

Clearly, we must do more. Technology has the potential to help provide solutions to three important problems. First, distance technologies will help the public two- and four-year institutions reach students who are time- or placebound. Second, increased use of instructional technologies will also help institutions improve the quality of students' educational experiences and augment—but not replace—the work of faculty. Third, employers indicate that our graduates need solid technical skills along with the communication and thinking skills commonly associated with a college-level liberal arts education.

To realize the potential benefits promised by technology, we will need answers to many questions. A few of these questions are: *How much front-end investment is needed? How can technology increase productivity and what cost savings are possible? How can technology improve student learning? How do we encourage creative uses of technology and what are the barriers to experimentation that must be removed?*

Solutions

"Together we can make $2 + $2 do the work of $5, and the ideas we come up with together are much better than the ideas either of us comes up with alone."

David Habura,
President,
Cascadia Community
College

PARTNERSHIPS

Education at each level is entwined with the communities in which it occurs, and with all other levels and sectors of education. It can thrive only when those partnerships are intentional, pervasive, and sustain the interests of all parties involved.

K-12 restructuring efforts require three kinds of collaboration with higher education: public support, new designs in teacher education, and widely available in-service education responsive to the changing system. The presidents of the six public four-year institutions recently signed a statement of support that encourages applications from students attending restructured schools. A committee sponsored by the Board and the State Board of Education is revising the HECB minimum admission standards consistent with the essential learning requirements of the Commission on Student Learning. A number of teacher education programs are working with local school districts to align teacher education and in-service with restructuring.

The Washington Center for Improving the Quality of Undergraduate Education brings two- and four-year institutions together to enhance teaching and learning. The co-location of UW Bothell and Cascadia Community College is a new partnership model that promises considerable benefits for students. Running Start is an example of cooperation between high schools and community colleges (plus three public universities) which enables high school students to earn both high school and college credit for college courses taken on the college campus. Running Start saves time and money for both students and the state, and provides challenging opportunities for students. The Joint Center for Higher Education in Spokane is a partnership among public and private institutions; another public-private collaboration is Eastern Washington University and Heritage College, who are working together to develop a social work program at Heritage while EWU's Master of Social Work is temporarily located on the Heritage campus. Washington State University has developed a productive alliance with Microsoft which is helping the university to realize its dream of a "virtual WSU." Hundreds of other examples could be cited.

But partnerships are now recognized as a strategy whose real potential has yet to be tapped. *How can the boundaries be lessened among K-12, community and technical colleges, and baccalaureate institutions while maintaining the strength of their distinctive missions? What—and how—can business and higher education mutually gain by working together? What will be the common ground that encourages more partnerships among public and independent institutions?*

"Efficiency is not a synonym for mediocrity."

Karen Morse,
President, WWU

EFFICIENCY

Efforts to improve efficiency are already underway at the two- and four-year institutions. For example, the Time-to-Degree Study identified over 130 changes that the two- and four-year institutions determined would help improve efficiency and, in time, increase access. Some of these changes—such as using technologies to help transfer students take the appropriate classes for their intended majors—may require an investment from the state. Other changes—such as changing the policies on dropping courses—may not. With recent budget reductions, all institutions have made administration more efficient.

However, more must be done. Institutions understand that they have a responsibility to respond to the needs of the state, including operating efficiently and improving learning productivity. Efficiency will continue to be important to ensure that state resources are used wisely and students benefit from quality learning. Efficiencies can be small or large; involve a simple change in policy or the redesign of core activities; save money and cost money. It is important, however, that institutions continue to evaluate what they do since they are the most likely to see what can be improved and how. It would also be helpful to implement the Fund for Innovation (adopted by the 1991 Legislature as the Fund for Excellence but never funded) to support pilot projects that will test new ideas and find more efficient ways of educating students.

Institutions have been challenged over the last several years to become more productive. Since the 1991-93 biennium, institutional base budgets have been reduced by over ten percent. At the same time, the Legislature funded increased enrollments. Although higher education is organized differently from private industry, some private firms have set goals to increase productivity by 30% to 50% over a five-year period. To meet these ambitious goals, firms have restructured and "reengineered" the way they do business. Productivity increases of 10% to 20% in higher educatiton would mean savings of $150 to $300 million per year for the state.

What goals would be reasonable for higher education? What changes would higher education need to make in order to realize savings of this magnitude? Only our imagination limits the number or type of changes that can improve efficiency. Can a shift to a focus on learning lead to new ways of thinking about efficiency? How much improvement in efficiency can we realize and how many students could be accommodated? How can incentives be used to promote efficiency? What are the limits to efficiency?

Solutions

"To give money away is an easy matter and in any man's power. But to decide to whom to give it, and how large, and when, and for what purpose, and how, is neither in every man's power nor an easy matter."

Aristotle

STUDENT FINANCIAL AID

Many who aspire to postsecondary education and training cannot afford the cost without financial help. During the 1994-95 academic year, approximately 95,000 Washington students received enough financial aid to remove economic barriers and permit them to enroll in higher education. For these individuals, student financial aid made the difference in whether their potential could be realized. The state of Washington played a significant role in providing that assistance, particularly for low-income students.

Financial aid serves the public interest by "leveling the playing field" so that qualified students with limited personal or family resources can have an equal opportunity to get training or a college education. In addition to preserving equal educational opportunity, financial aid creates incentives for students to act in a manner beneficial to the state, usually measured through cost savings. Financial aid is used throughout the country to: (1) encourage students to enroll in institutions that have unused capacity, are geographically remote, private or out of state; (2) promote careers in areas where workforce shortages exist; (3) achieve academic excellence; or (4) encourage students to graduate more quickly. Student aid thus works in support of the state's broader higher education goals, which makes policy coordination among financial aid, enrollment, admissions and tuition pricing more important than ever.

The challenge before us is immense. An increasing number of students will need financial assistance. With this in mind, the Board has formed a "blue ribbon committee" on student financial aid, to have its work completed by July 1996.

The committee will assess such questions as: *Does the current distribution of student aid result in unequal access to higher education, by family income ranges? What savings can be achieved within current programs? What existing funds can be leveraged? Which types and amounts of aid most effectively influence students to enroll in, persist, and graduate from college? How will changing demographics and varying assumptions about future tuition rates affect the financial aid picture? Given the answers to these and related questions, what level of state-funded financial aid will be necessary to achieve the state's enrollment goal?*

Solutions

"Whatever the expense of improving education, it is an investment in the future we must make. Excellence costs. But in the long run mediocrity costs far more."

Glen T. Seaborg,
Nobel Laureate,
former president,
University of California
at Berkeley

INVESTMENT

In the current biennium, the state will invest slightly over $2 billion of state operating funds to provide higher education services to over 220,000 FTE students each year. This dollar amount represents 11% of the state general fund budget for the biennium. It does not include capital costs.

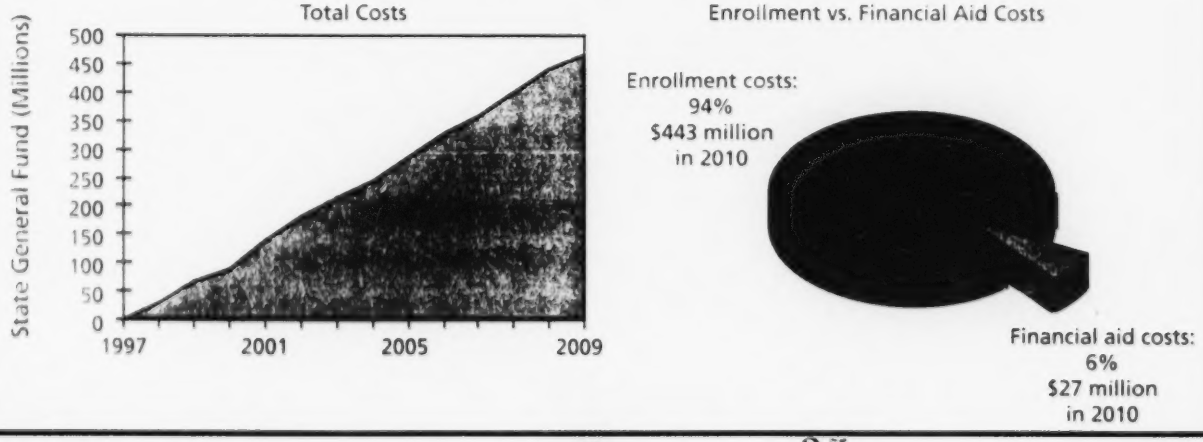
How much will the Board's enrollment plan cost? The following graph estimates the incremental operating costs to implement the enrollment plan at public institutions each year through 2010. These amounts are based on funding 84,100 additional FTE students at the current average state support per FTE student, and are the net cost to the state; i.e., total cost, less tuition at current rates. No capital costs are included.

The pie chart also estimates the cost of student financial aid related to the enrollment plan. Using support factors for the current state financial aid programs, each additional FTE student represents additional financial aid costs of $324 per year. No assumptions have been made about factors that might affect aid in the future.

Together, the enrollment plan and related financial aid would add $470 million annually to the costs of higher education in 2010; this is an increase of 47% over the current budgeted amount. (Fig. 25) This estimate assumes that state support for each student would need to be continued at current support levels. Funding this level of state support from the General Fund would require increasing the portion of the General Fund provided for higher education purposes to 13.2% in 2010.

Individuals, society, and the economy all benefit from an investment in higher education. *What is a reasonable level of state investment in higher education? What is a reasonable level of investment to expect from students? Should private industry be expected to invest in higher education at higher levels?*

Figure 25
Additional Enrollment and Financial Aid State Costs for Plan Implementation



Solutions

"...any system of institutional incentives based on outcomes would lead to greater learning than any system of incentives based on inputs."

Robert B. Barr, director of institutional research and planning and John Tagg, associate professor of English, Palomar College, San Marcos, CA
Change, 1995.

INCENTIVES

Incentives are always at work in the lives of individuals and systems. Among the incentives provided to faculty and staff at colleges and universities are salaries, promotions, and funds to run programs they care about. Washington institutions have in the past responded creatively to funding initiatives. For example, assessment funds were an incentive for each institution to focus systematically on improving the quality of student learning. Funding in the Timber Workers Education Program was an incentive for WSU to develop the state's first extended-degree program. Other types of incentives can be devised that are directed to individuals, institutions, and systems to encourage actions that support state priorities.

The Board has a high priority at this time to encourage greater access to cost-efficient, quality learning. Other ways that this priority has been expressed by the HECB and the Legislature include increasing operating efficiency and learning productivity and reaching more students through technology. Types of incentives available to the state include:

- grants to create precisely targeted change, such as removing a specific barrier to lower time-to-degree;
- both large and small numbers of enrollments allocated based on institutional plans to use them for innovative delivery methods or restructured programs;
- encouragement to tackle a problem combined with positive publicity for accomplishing desired outcomes; and
- relief from regulatory controls in exchange for specific outcomes.

Important questions yet to be addressed in the use of incentives include: *How can new resources be made available to institutions based on concrete progress toward institutional and state goals? How can incentives be aligned—in both type and size—with the desired outcome in order to generate the most effective, long-term change and avoid unintended side effects? How can competitive incentive programs be designed to enhance collaboration among institutions rather than breaking it down?*

Challenges

"Pleading for money to do business as usual will not succeed."

Richard R. Sonstelie,
Chair, HECB
President and CEO Puget
Sound Power and Light Co.

Our challenge for the higher education system of the State of Washington is to provide the opportunity for access to each of its citizens to quality programs of learning which allow individuals to reach their full potential and provide benefit to society as a whole. Throughout this master plan, we have made the case that the return on the state's investment in higher education is substantial. Yet, higher education's portion of the state general fund has been diminishing for over a decade. This trend is troubling and must be stopped.

In the next 15 years, over 84,000 additional students will be seeking access to the higher education system. Will we be prepared to serve them? Will we seriously explore the questions raised by many of the solutions put forward in this document? Will we make strides in technology? Will we improve the efficiency and productivity of the system? Will we design new delivery models that focus on learning? Will we forge partnerships that strengthen the system? Will we assure that people of all races and income levels have an equal chance to get an education? Will we invest in the higher education system (and by extension in individuals, families and society) at a level commensurate with its potential for return?

We **cannot** continue to conduct "business as usual," and these are only some of the tasks before us. In the next few pages, we ask different constituents to help us meet the challenge of creating access with quality. Their responses—and ours—will determine the direction of higher education in this state.

Challenges

"Decisions made now about access to higher education will shape the kind of society our children will live in (and) the economic prosperity of the state."

Jane Jervis,
President, TESC

TO THE STATE . . .

The Board challenges the State to fund the following initiatives:

- New enrollments to meet the Board's access goals, including enrollments appropriated directly to the institutions and a pool of enrollments or equivalent funding to be used for implementing innovative solutions to higher education challenges;
- Investments in technology to support both access and quality;
- The Fund for Innovation proposed by the HECB to provide incentives for creativity and innovation in solving the challenges facing higher education; and
- A study of the costs and benefits of diverse delivery options, including various types of locations, sectors, and technologies.

The Board challenges the State to explore ways to:

- Grant increased flexibility to institutions in return for adequate accountability reporting.

Challenges

"At some point, continued growth demands new structures."

Richard McCormick, President, UW

TO THE PUBLIC HIGHER EDUCATION SYSTEM . . .

The Board challenges the State Board for Community and Technical Colleges and the six public four-year institutions to:

- Increase access to quality learning to support the Board's enrollment plan. A plan to accomplish this should be submitted to the Board. It should address the systemwide or institutional plan for restructuring, use of technologies, partnerships, or other means of providing access to quality learning at lower cost. The plan should propose enrollment and efficiency goals against which progress on the plan can be assessed;

- Constantly innovate and respond to the changes occurring in the workplace and society at large, including finding ways to improve productivity;

- Report the outcomes of institutional efforts in areas such as (1) progress on access and restructuring; (2) student learning; and (3) other mission-related activities of the institution;

- Achieve the statewide goals set forth by the Board in its Policy on Participation by People of Color and its Statewide Goals for Students with Disabilities in Higher Education;

- Forge new partnerships, reduce boundaries, and support K-12 restructuring to benefit students moving through the educational system; and

- Increase the proportion of community college students who are prepared to continue their education at the baccalaureate level.

Challenges

"Higher education faces an incredible challenge in meeting the needs of this rapidly growing population and preparing them for a changing and expanding economy."

Loren Anderson,
President, PLU

TO THE INDEPENDENT INSTITUTIONS . . .

The Board challenges:

- The independent institutions to increase access for Washington residents in support of the Board's enrollment plan and to collectively submit a plan that details a) where, b) when and c) how many students can be served, plus d) the cost of providing these services.

"Our success as adults depends on the quality of our education. If schools don't keep up with the changes in the world, neither will we."

Kellen Olsen,
High School Student

TO STUDENTS . . .

The Board challenges:

- K-12 students to prepare for continued education beyond high school by setting high expectations for themselves, completing demanding course work, and exploring career options and opportunities for further education.

- Postsecondary students to identify their goals and pursue them efficiently, to achieve their highest potential, and to contribute back to society.

Challenges

"It is access that drives much of the debate today about the future of higher education in this state."

Marshall Drummond,
President, EWU

TO THE HECB . . .

The Board accepts the challenge to:

- Take a leadership role in conveying both the importance of and the needs of higher education to a wide range of constituencies;
- Respond to the changes occurring in society by encouraging innovation and continually pursuing productivity improvements;
- Convene the "Blue Ribbon Committee" on financial aid and bring to the legislature and governor recommendations developed in the course of its work and approved by the HECB;
- Develop and administer incentive programs funded by the legislature to assist the institutions in meeting their restructuring goals;
- Contract for an independent study of the costs and benefits of diverse delivery options, including various types of locations, sectors, and technologies in order to make enrollment distribution and policy recommendations to the legislature; and
- Provide leadership in encouraging partnerships, reducing boundaries among levels of education, and supporting K-12 restructuring.

A Brief History

What is the Higher Education Coordinating Board's role in planning for the higher education system?

The Higher Education Coordinating Board (HECB) was created after the "3609" committee* of legislators and citizens completed a comprehensive review of Washington's public educational system in 1984. The committee's report, *The Paramount Duty*, included a recommendation to establish a state higher education board to strengthen higher education planning, program review, and research. The report also identified four goals—quality, responsiveness, efficiency, and accessibility—for public postsecondary institutions. These goals have been present in HECB plans for almost a decade.

The 1987 master plan, *Building a System*, emphasized high quality and access and called for the higher education system to become "one of the five best systems in the United States." Recommendations from the plan which have since been implemented include:

- branch campuses to increase service to urban areas;
- new minimum admission standards;
- system of performance evaluation (assessment system); and
- increased minority student participation.

In 1990, the Board prepared a long-range plan for the orderly development of the branch campuses, including governing policies and estimates of operating and capital costs. That report, *Design for the 21st Century: Expanding Higher Education Opportunity in Washington*, established an:

- enrollment goal and distribution plan to achieve statewide, a level of upper-division and graduate enrollment equal to the 70th percentile in national participation rates by 2010.

The Legislature funded the Board-recommended enrollment goals until fiscal year 1995, when competing demands on the state general fund resulted in a smaller increase in funded enrollment.

The Board updated the master plan in 1992. The report, *A Commitment to Opportunity*, underscored its commitment to access, quality and protection of the public investment and resulted in:

- greater upper-division access for persons in geographically-isolated communities (with the advent of a statewide distance education degree program);
- expanded state financial aid programs targeted to the neediest students; and
- performance studies (e.g., faculty workload, time-to-degree).

* Washington State Temporary Committee on Educational Policies, Structure, and Management

Washington Higher Education System

Four-Year Public

Central Washington University
Eastern Washington University
The Evergreen State College
University of Washington
Washington State University
Western Washington University

Four-Year Public Branch Campuses

University of Washington: Bothell
University of Washington: Tacoma
Washington State University: Spokane
Washington State University: Vancouver
Washington State University: Tri-Cities

Four-Year Public Off-Campus Centers

Central Washington University: Lynnwood, SeaTac, Steilacoom, Wenatchee, Yakima
The Evergreen State College: Tacoma
Western Washington University: Seattle

Community and Technical Colleges

Bates Technical College
Bellevue Community College
Bellingham Technical College
Big Bend Community College
Cascadia Community College
Centralia College
Clark College
Clover Park Technical College
Columbia Basin College
Edmonds Community College
Everett Community College
Grays Harbor College
Green River Community College
Highline Community College
Lake Washington Technical College
Lower Columbia College
North Seattle Community College
Olympic College
Peninsula College
Pierce College
Renton Technical College
Seattle Central Community College
Seattle Vocational Institute
Shoreline Community College
Skagit Valley College
South Puget Sound Community College
South Seattle Community College
Spokane Community College
Spokane Falls Community College
Tacoma Community College
Walla Walla Community College
Wenatchee Valley College
Whatcom Community College
Yakima Valley Community College

Four-Year Private

Bastyr University
City University
Cornish College of the Arts
Gonzaga University
Heritage College
Lutheran Bible Institute of Seattle
Northwest College of the Assemblies of God
Pacific Lutheran University
Puget Sound Christian College
St. Martin's College
Seattle Pacific University
Seattle University
University of Puget Sound
Walla Walla College
Whitman College
Whitworth College

Two-Year Private

Northwest Indian College

Authorized Institutions

Antioch University
Center for Innovation in Education
Chapman University
Henry Cogswell College
Columbia College
Embry-Riddle Aeronautical University
Fred Hutchinson Cancer Research Center
Gallaudet University
Golden Gate University
ITT Bothell
Lesley College
Lewis and Clark College
Linfield College
Northwest Aviation College
Northwest Institute of Acupuncture and Oriental Medicine
Nova Southeastern University
Oregon State University
Pacific Oaks College
Park College
Pepperdine University
Portland State University
Regent University
Southern Illinois University at Carbondale
University of Portland
Vincennes University
Walden University
Western Oregon State College

Licensed Private Vocational Schools

231 Schools

Community and Technical Colleges Off-Campus Centers

Virtually all of the community colleges and two of the technical colleges operate off-campus centers. These 58 centers provide both comprehensive and selected offerings in one or more of the community and technical college mission areas (i.e., transfer, workforce training, basic skills, and community service).

Joint Centers (Multi-Institution)

Intercollegiate Center for Nursing Education: Spokane
Joint Center for Higher Education: Spokane
Spokane Intercollegiate Research and Technical Institute: Spokane